5th Grade Pacing Module 2 *with Suggested Modifications* **Key**

Optional Lesson

Extension Lesson

Remedial Lesson



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| Standards | Topic and Objectives | | |  |
| **5.NBT.1**  **5.NBT.2**  5.OA.1 | A | Mental Strategies for Multi-Digit Whole Number Multiplication  Lesson 1: Lesson 1: Multiply multi-digit whole numbers and multiples of 10 using place value patterns and the distributive and associative properties.  Lesson 2: Lesson 2: Estimate multi-digit products by rounding factors to a basic fact and using place value patterns. | | **Days: 2** |
| By the end of Topic A, your students should be able to:   * Multiply whole numbers by multiples of 10 * Know and use distributive and associative properties of multiplication * Estimate by rounding to multiple of 10 | | | | |
| **5.OA.1**  **5.OA.2**  **5.NBT.5** | B | The Standard Algorithm for Multi-Digit Whole Number Multiplication  Lesson 3: \*\*Lesson 3: Write and interpret numerical expressions and compare expressions using a visual model.  Lesson 4: Lesson 4: Convert numerical expressions into unit form as a mental strategy for multi-digit multiplication.  Lesson 5: Lesson 5: Connect visual models and the distributive property to partial products of the standard algorithm without renaming.  Lesson 6: Lesson 6: Connect area diagrams and the distributive property to partial products of the standard algorithm without renaming.  Lesson 7: Lesson 7: Connect area diagrams and the distributive property to partial products of the standard algorithm with renaming.  Lesson 8: Lesson 8: Fluently multiply multi-digit whole numbers using the standard algorithm and using estimation to check for reasonableness of the product.  Lesson 9: Lesson 9: Fluently multiply multi-digit whole numbers using the standard algorithm to solve multi-step word problems. | | **Days: 6**  \*\*Before teaching Lesson 3, review order of operations with students.  **Extension Lesson 4**, it uses mental strategy for multi-digit multiplication. |
| By the end of Topic B, your students should be able to:   * Use parenthesis and brackets to evaluate expressions * Use area diagrams and partial products to connect with the standard algorithm for multiplication with and without renaming * Multiply using the standard algorithm and use estimation to check reasonableness of product * Use the standard algorithm to solve multi-step word problems   **Snapshot Assessment for 5.OA.1**  Evaluate the expression. (DOK 1)  136 ÷ (11-7)  When evaluating the expressions below, which expression has a value of 6? Explain your reasoning. (DOK 1)  24 – 6 ÷ 3  or  8 – 6 ÷ 3  **Snapshot Assessment for 5.OA.2**  [Snapshot Assessment - Module 2](http://www.fwps.org/tfl/wp-content/uploads/sites/3/2013/12/Snapshot-Assessment-5.OA_.2.pdf?697a0d)  **Snapshot Assessment for 5.NBT.5**  Find the product using the standard algorithm. Show your work below. (DOK 1)  7, 932 x 378 =  New button-up shirts at Costco are on sale for $23 each. At the end of the day, Costco sold 437 shirts. How much money did Costco make selling shirts? (DOK 1) | | | | |
| **5.NBT.7**  5.OA.1  5.OA.2  5.NBT.1 | C | Decimal Multi-Digit Multiplication  Lesson 10: Lesson 10: Multiply decimal fractions with tenths by multi-digit whole numbers using place value understanding to record partial products.  Lesson 11: Lesson 11: Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal.  Lesson 12: Lesson 12: Reason about the product of a whole number and a decimal with hundredths using place value understanding and estimation. | | **Days: 3**  For Remediation: Lesson 11 from Module 1 - Multiply a decimal fraction by single-digit whole numbers |
| By the end of Topic C, your students should be able to:   * Multiply decimal fractions with tenths by multi-digit whole numbers * Use estimation to justify the reasonableness of your product   **Snapshot Assessment for 5.NBT.7**  Find the product. Show your work below. (DOK 1)  1.9 x 26 =  Xander claims that for any decimal multiplied by 0.5, n will always be less than 0.5. (DOK 3)  0.5 x \_\_.\_\_ = n   Write one decimal that supports his claim.   Write one decimal that refutes (does not support) his claim. | | | | |
| **5.NBT.5**  **5.NBT.7**  **5.MD.1**  5.NBT.1  5.NBT.2 | D | Measurement Word Problems with Whole Number and Decimal Multiplication  Lesson 13: Lesson 13: Use whole number multiplication to express equivalent measurements.  Lesson 14: Lesson 14: Use decimal multiplication to express equivalent measurements.  Lesson 15: Lesson 15: Solve two-step word problems involving measurement and multi-digit multiplication. | | **Days: 3** |
| By the end of Topic D, your students should be able to:   * Convert measurements within the same measurement system * Use whole number and decimal multiplication to express equivalent measurements (for example: 1.37m = 137 cm)   **Snapshot Assessment for 5.NBT.7**  3.7kg = \_\_\_\_\_\_g2  **Rich Task for 5.NBT.7 and 5.MD.1**  A black lab gave birth to 3 puppies. The first puppy weighed 6.1kg, the second weighed 308g less than the first, and the third puppy weighed 0.4kg more than the second puppy. The mother weighed 6 times the total weight of her litter (3 puppies). What was her weight in kilograms? | | | | |
| *3 Days for Remediation, Enrichment, Mid-Module Assessment*  [Mid Module Assessment Word Document](https://www.engageny.org/resource/grade-5-mathematics-module-2)  *SBAC Released Item*  Which equation has the same unknown value as 228 ÷ 12 = □?  A. 228 × □ = 12 C. □ ÷ 12 = 228  B. 12 × □ = 228 D. □ ÷ 228 = 12  **Rubric:** (1 point) The student selects the correct option (e.g., B). | | | | |
| **5.NBT.1**  **5.NBT.2**  **5.NBT.6** | E | Mental Strategies for Multi-Digit Whole Number Division  Lesson 16: Lesson 16: Use *divide by 10* patterns for multi-digit whole number division.  Lessons 17: Lesson 17: Use basic facts to approximate quotients with two-digit divisors.  Lessons 18: Lesson 18: Use basic facts to approximate quotients with two-digit divisors. | | **Days: 2**  **Optional Lesson 17,** it is repetitive. |
| By the end of Topic E, your students should be able to:   * Divide by patterns of 10 (example:150/10 = 15) * Approximate quotients with two-digit divisors   **Snapshot Assessment for 5.NBT.2**  Divide. Show your work below.  (DOK 1)  **204 ÷ 20**  [**Snapshot Assessment**](http://www.fwps.org/tfl/wp-content/uploads/sites/3/2013/12/Snapshot-Assessment-5.NBT_.6.pdf?697a0d) **5.NBT.6**- do problem #4 | | | | |
| **5.NBT.6** | F | Partial Quotients and Multi-Digit Whole Number Division  Lesson 19: Lesson 19: Divide two- and three-digit dividends by multiples of 10 with single-digit quotients and make connections to a written method.  Lesson 20: Lesson 20: Divide two- and three-digit dividends by two-digit divisors with single-digit quotients and make connections to a written method.  Lesson 21: Lesson 21: Divide two- and three-digit dividends by two-digit divisors with single-digit quotients and make connections to a written method.  Lessons 22: Lesson 22: Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value.  Lessons 23: Lesson 23: Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value.  **Combine Lessons 22 & 23** | | **Days: 4**    **Combine Lessons 22 and 23,** Use concept development problems #1 and 2 from Lesson 22 and problems #3 and 4 from 23. Use problem set and exit ticket from Lesson 23. |
| By the end of Topic F, your students should be able to:   * Divide up to four-digit dividends by up to two-digit divisors * Interpret remainders   **Snapshot Assessment for 5.NBT.6**  Michael has 219 football cards. Each page of his football card album holds 15 cards. How many pages does Michael need to hold all of his football cards? (DOK 1)  The community garden has an area of 1,872 square feet. The length of one side is 24 feet. The community pool also has an area of 1,872 square feet and the length of one side of the pool is 52 feet. Does the community’s pool or garden have a greater width? Explain how you know.  (DOK 2) | | | | |
| **5.NBT.2**  **5.NBT.7** | G | Partial Quotients and Multi-Digit Decimal Division  **Use Sprint from Module 1, Lesson 13.**  Lesson 24: Lesson 24: Divide decimal dividends by multiples of 10, reasoning about the placement of the decimal point and making connections to a written method.  Lesson 25: Lesson 25: Use basic facts to approximate decimal quotients with two-digit divisors, reasoning about the placement of the decimal point.  Lessons 26: Lesson 26: Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a written method.  Lessons 27: Lesson 27: Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a written method. | | **Days: 2**  Use Lesson 13 from Module 1 for remediation and concept development.  **Lessons 26** can be used for additional practice/re-teaching. |
| By the end of Topic G, your students should be able to:   * Divide by multiples of 10 * Divide decimals to hundredths * Explain reasoning on where the decimal point is placed   Snapshot Assessment for 5.NBT.7  [Dividing with Decimals Task](https://grade5commoncoremath.wikispaces.hcpss.org/file/view/5nbt7_assessmenttask3.docx/443524160/5nbt7_assessmenttask3.docx)  **SBAC Released Item:**  **Example Stem:** Which expression is equal to 16.25 ÷ 2.5?  A. 1.625 ÷ 25  B. 16.25 ÷ 25  C. 162.5 ÷ 25  D. 1625 ÷ 25  **Rubric:** (1 point) The student selects the correct option (e.g., C). | | | | |
| **5.NBT.6**  **5.NBT.7** | H | Measurement Word Problems with Multi-Digit Division  Lesson 28: Lesson 27: Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a written method.  Lesson 28: Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.  Lesson 29: Lesson 29: Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown. | **Days: 1**  **Add problem set from Lesson 27 to Lesson 28** so students have one problem set to use during the lesson and one for independent practice.  **Optional Lesson 29** and is repetitive of Lesson 28. Can be used for spiral review later in the year. | |
| By the end of Topic H, your students should be able to:   * Use division strategies to solve word problems with minimal errors | | | | |
| *3 Days for Re-Assessment, Remediation and Enrichment*  [End of Module Assessment Word Document](https://www.engageny.org/resource/grade-5-mathematics-module-2)  Summative Task for 5.NBT.2 and 5.NBT.7 from Georgia Math:  [Bargain Shopping - page 82](https://www.georgiastandards.org/Georgia-Standards/Frameworks/5th-Math-Unit-3.pdf) | | | | |
| ***Total Instructional Days: 29*** | | | | |

Links Used:

Georgia Math “Bargain Shopping”: <https://www.georgiastandards.org/Georgia-Standards/Frameworks/5th-Math-Unit-3.pdf> (see page 82)

Module Assessments: <https://www.engageny.org/resource/grade-5-mathematics-module-2>